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OM protein - protein search, using sw model

Run on: July 9, 2002, 12:19:00 ; Search time 15.96 Seconds  
(without alignments)  
32.207 Million cell updates/sec

Title: US-09-759-484-3

Perfect score: 22

Sequence: 1 AMVSE 5

Scoring table: BLOSUM62

Searched: 315933 seqs, 102804233 residues

Total number of hits satisfying chosen parameters: 315933

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Pending Patents\_AA\_New:\*  
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7: /cgn2\_6/ptodata/2/paa/US60\_NEW\_COMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	22	100.0	62	US-10-155-881-19006	Sequence 19006, A
2	22	100.0	92	US-09-620-393B-7044	Sequence 7044, Ap
3	22	100.0	110	US-10-155-881-27071	Sequence 27071, A
4	22	100.0	219	US-10-155-881-32065	Sequence 32065, A
5	22	100.0	287	US-10-155-881-18996	Sequence 18996, A
6	22	100.0	346	US-60-360-039-4933	Sequence 4933, Ap
7	22	100.0	368	US-60-360-039-7691	Sequence 7691, Ap
8	22	100.0	496	US-60-360-039-17032	Sequence 17032, A
9	22	100.0	768	US-09-935-625-16110	Sequence 16110, A
10	22	100.0	950	US-10-155-881-18997	Sequence 18997, A
11	22	100.0	1345	US-09-935-625-16229	Sequence 16229, A
12	22	100.0	201	US-09-620-393B-801	Sequence 801, App
13	22	100.0	213	US-09-620-393B-800	Sequence 800, App
14	22	100.0	220	US-09-620-393B-799	Sequence 799, App
15	22	100.0	263	US-09-935-625-8720	Sequence 8720, A
16	22	100.0	265	US-10-155-881-28168	Sequence 28168, A
17	22	100.0	319	US-60-360-039-13462	Sequence 13462, A
18	22	100.0	319	US-60-360-039-18275	Sequence 18275, A
19	22	100.0	370	US-10-155-881-28111	Sequence 28111, A
20	22	100.0	527	US-09-540-209B-9085	Sequence 9085, Ap
21	22	100.0	594	US-09-935-625-6889	Sequence 6889, Ap
22	22	100.0	600	US-60-360-039-12219	Sequence 12219, A
23	22	100.0	728	US-09-935-625-6888	Sequence 6888, Ap
24	22	100.0	777	US-09-935-625-6887	Sequence 6887, Ap
25	22	100.0	1080	US-09-935-625-8365	Sequence 8365, Ap
26	22	100.0	1080	US-09-935-625-25559	Sequence 25559, A

27	21	95.5	1092	5	US-09-935-625-8364	Sequence 8364, Ap
28	21	95.5	1092	5	US-09-935-625-25558	Sequence 25558, A
29	21	95.5	1138	5	US-09-935-625-8363	Sequence 8363, Ap
30	21	95.5	1138	5	US-09-935-625-25557	Sequence 25557, A
31	19	86.4	36	6	US-10-120-319-18	Sequence 18, Appl
32	19	86.4	69	5	US-09-620-393B-7099	Sequence 7099, Ap
33	19	86.4	71	5	US-09-620-393B-726	Sequence 726, App
34	19	86.4	76	6	US-10-155-881-20883	Sequence 20883, A
35	19	86.4	78	6	US-10-155-881-21011	Sequence 21011, A
36	19	86.4	84	5	US-09-935-625-32095	Sequence 32095, A
37	19	86.4	84	5	US-09-935-625-32303	Sequence 32303, A
38	19	86.4	90	1	PCT-US02-07826-181	Sequence 181, Appl
39	19	86.4	90	5	US-09-975-502A-6	Sequence 6, Appl
40	19	86.4	90	6	US-10-097-340-181	Sequence 181, App
41	19	86.4	123	6	US-10-144-860-206	Sequence 206, Appl
42	19	86.4	129	5	US-09-667-170A-36	Sequence 36, Appl
43	19	86.4	143	5	US-09-620-393B-3530	Sequence 3530, Ap
44	19	86.4	147	5	US-09-620-393B-7153	Sequence 7153, Ap
45	19	86.4	153	5	US-09-620-393B-3529	Sequence 3529, Ap

## ALIGNMENTS

```
RESULT 1
US-10-155-881-19006
; Sequence 19006, Application US/10155881
; GENERAL INFORMATION:
; APPLICANT: Dotson, Stanton B.
; APPLICANT: Kovalic, David K.
; APPLICANT: Liu, Jingdong
; APPLICANT: Lutfiyya, Linda L.
; APPLICANT: McIntosh, James
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH
; FILE REFERENCE: 38-21(15300)J
; CURRENT APPLICATION NUMBER: US/10/155,881
; CURRENT FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 37595
; SEQ ID NO 19006
; LENGTH: 62
; TYPE: PRT
; ORGANISM: Glycine max
; US-10-155-881-19006

Query Match 100.0%; Score 22; DB 6; Length 62;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 AMVSE 5
DB 44 AMVSE 48

RESULT 2
US-09-620-393B-7044
; Sequence 7044, Application US/09620393B
; GENERAL INFORMATION:
; APPLICANT: ALEXANDROV, Nikolai et al.
; TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTID
; FILE REFERENCE: 2750-1068P
; CURRENT APPLICATION NUMBER: US/09/620,393B
; CURRENT FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 9948
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7044
; LENGTH: 92
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: misc_feature
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LOCATION: 1..92  
OTHER INFORMATION: Xaa is any amino acid  
FEATURE:  
NAME/KEY: misc.feature  
LOCATION: 1..92  
OTHER INFORMATION: Ceres Seq. ID 1396003  
US-09-620-393B-7044

Query Match 100.0%; Score 22; DB 5; Length 92;  
Best Local Similarity 100.0%; Pred. No. 18;  
Matches 5; Conservative 0; Indels 0; Gaps 0;

OY 1 AMVSE 5  
11111  
DB 6 AMVSE 10

RESULT 3  
US-10-155-881-27071  
Sequence 27071, Application US/10155881  
GENERAL INFORMATION:  
APPLICANT: Dolson, Stanton B.  
APPLICANT: Kovalic, David K.  
APPLICANT: Liu, Jindong  
APPLICANT: Lutfiyya, Linda L.  
APPLICANT: McIninch, James  
TITLE OF INVENTION: NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH  
FILE REFERENCE: 38-21(15300)J  
CURRENT APPLICATION NUMBER: US/10/155,881  
CURRENT FILING DATE: 2002-05-22  
NUMBER OF SEQ ID NOS: 37595  
SEQ ID NO 27071  
LENGTH: 110  
TYPE: PRT  
ORGANISM: Oryza sativa  
US-10-155-881-27071

Query Match 100.0%; Score 22; DB 6; Length 110;  
Best Local Similarity 100.0%; Pred. No. 22;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 AMVSE 5  
11111  
DB 55 AMVSE 59

RESULT 4  
US-10-155-881-32065  
Sequence 32065, Application US/10155881  
GENERAL INFORMATION:  
APPLICANT: Dolson, Stanton B.  
APPLICANT: Kovalic, David K.  
APPLICANT: Liu, Jindong  
APPLICANT: Lutfiyya, Linda L.  
APPLICANT: McIninch, James  
TITLE OF INVENTION: NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH  
FILE REFERENCE: 38-21(15300)J  
CURRENT APPLICATION NUMBER: US/10/155,881  
CURRENT FILING DATE: 2002-05-22  
NUMBER OF SEQ ID NOS: 37595  
SEQ ID NO 32065  
LENGTH: 219  
TYPE: PRT  
ORGANISM: Glycine max  
US-10-155-881-32065

Query Match 100.0%; Score 22; DB 6; Length 219;  
Best Local Similarity 100.0%; Pred. No. 51;

Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1 AMVSE 5  
11111  
DB 201 AMVSE 205

RESULT 5  
US-10-155-881-18996  
Sequence 18996, Application US/10155881  
GENERAL INFORMATION:  
APPLICANT: Dolson, Stanton B.  
APPLICANT: Kovalic, David K.  
APPLICANT: Liu, Jindong  
APPLICANT: Lutfiyya, Linda L.  
APPLICANT: McIninch, James  
TITLE OF INVENTION: NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH  
FILE REFERENCE: 38-21(15300)J  
CURRENT APPLICATION NUMBER: US/10/155,881  
CURRENT FILING DATE: 2002-05-22  
NUMBER OF SEQ ID NOS: 37595  
SEQ ID NO 18996  
LENGTH: 287  
TYPE: PRT  
ORGANISM: Glycine max  
US-10-155-881-18996

Query Match 100.0%; Score 22; DB 6; Length 287;  
Best Local Similarity 100.0%; Pred. No. 70;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 AMVSE 5  
11111  
DB 269 AMVSE 273

RESULT 6  
US-60-360-039-4933  
Sequence 4933, Application US/60360039  
GENERAL INFORMATION:  
APPLICANT: Cao, Yongwei  
APPLICANT: Chen, Xianfeng  
APPLICANT: Goldman, Barry S.  
APPLICANT: Hinkle, Gregory J.  
APPLICANT: Slater, Steven C.  
TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF  
FILE REFERENCE: 38-10(52052)A  
CURRENT APPLICATION NUMBER: US/60/360,039  
CURRENT FILING DATE: 2002-02-21  
NUMBER OF SEQ ID NOS: 47374  
SEQ ID NO 4933  
LENGTH: 346  
TYPE: PRT  
ORGANISM: Burkholderia fungorum  
US-60-360-039-4933

Query Match 100.0%; Score 22; DB 7; Length 346;  
Best Local Similarity 100.0%; Pred. No. 88;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 AMVSE 5  
11111  
DB 88 AMVSE 92

RESULT 7  
US-60-360-039-7691  
Sequence 7691, Application US/60360039  
GENERAL INFORMATION:

APPLICANT: Cao, Yongwei  
APPLICANT: Chen, Xianfeng  
APPLICANT: Goldman, Barry S.  
APPLICANT: Hinkle, Gregory J.  
APPLICANT: Slater, Steven C.  
TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF  
FILE REFERENCE: 38-10(52052)A  
CURRENT APPLICATION NUMBER: US/60/360,039  
CURRENT FILING DATE: 2002-02-21  
NUMBER OF SEQ ID NOS: 47374  
SEQ ID NO 7691  
LENGTH: 368  
TYPE: PRT  
ORGANISM: Burkholderia cepacia  
US-60-360-039-7691

Query Match 100.0%; Score 22; DB 7; Length 368;  
Best Local Similarity 100.0%; Pred. No. 95;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 AMVSE 5  
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DB 90 AMVSE 94

RESULT 8  
US-60-360-039-17032  
Sequence 17032, Application US/60360039  
GENERAL INFORMATION:  
APPLICANT: Cao, Yongwei  
APPLICANT: Chen, Xianfeng  
APPLICANT: Goldman, Barry S.  
APPLICANT: Hinkle, Gregory J.  
APPLICANT: Slater, Steven C.  
TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF  
FILE REFERENCE: 38-10(52052)A  
CURRENT APPLICATION NUMBER: US/60/360,039  
CURRENT FILING DATE: 2002-02-21  
NUMBER OF SEQ ID NOS: 47374  
SEQ ID NO 17032  
LENGTH: 496  
TYPE: PRT  
ORGANISM: Caulobacter crescentus  
US-60-360-039-17032

Query Match 100.0%; Score 22; DB 7; Length 496;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 AMVSE 5  
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DB 341 AMVSE 345

RESULT 9  
US-09-935-625-16110  
Sequence 16110, Application US/09935625  
GENERAL INFORMATION:  
APPLICANT: N. Alexandrov et al.  
TITLE OF INVENTION: POLYNUCLEOTIDES, POLYPEPTIDES, CELLS, AND METHODS THEREOF CAPABLE  
FILE REFERENCE: 2750-1481P  
CURRENT APPLICATION NUMBER: US/09/935,625  
CURRENT FILING DATE: 2001-08-24  
NUMBER OF SEQ ID NOS: 33136  
SEQ ID NO 16110  
LENGTH: 768  
TYPE: PRT  
ORGANISM: Arabidopsis thaliana

FEATURE:  
NAME/KEY: peptide  
LOCATION: 1..768  
OTHER INFORMATION: Ceres Seq. ID no. 1714504  
US-09-935-625-16110

Query Match 100.0%; Score 22; DB 5; Length 768;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 AMVSE 5  
|||||  
DB 6 AMVSE 10

RESULT 10  
US-10-155-881-18997  
Sequence 18997, Application US/10155881  
GENERAL INFORMATION:  
APPLICANT: Dotson, Stanton B.  
APPLICANT: Kovall, David K.  
APPLICANT: Liu, Jingdong  
APPLICANT: Lutfiyya, Linda L.  
APPLICANT: McIninch, James  
TITLE OF INVENTION: NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED WITH  
FILE REFERENCE: 38-21(15300)J  
CURRENT APPLICATION NUMBER: US/10/155,881  
CURRENT FILING DATE: 2002-05-22  
NUMBER OF SEQ ID NOS: 37595  
SEQ ID NO 18997  
LENGTH: 950  
TYPE: PRT  
ORGANISM: Glycine max  
US-10-155-881-18997

Query Match 100.0%; Score 22; DB 6; Length 950;  
Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 AMVSE 5  
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DB 932 AMVSE 936

RESULT 11  
US-09-935-625-16229  
Sequence 16229, Application US/09935625  
GENERAL INFORMATION:  
APPLICANT: N. Alexandrov et al.  
TITLE OF INVENTION: POLYNUCLEOTIDES, POLYPEPTIDES, CELLS, AND METHODS THEREOF CAP  
FILE REFERENCE: 2750-1481P  
CURRENT APPLICATION NUMBER: US/09/935,625  
CURRENT FILING DATE: 2001-08-24  
NUMBER OF SEQ ID NOS: 33136  
SEQ ID NO 16229  
LENGTH: 1345  
TYPE: PRT  
ORGANISM: Arabidopsis thaliana  
FEATURE:  
NAME/KEY: peptide  
LOCATION: 1..1345  
OTHER INFORMATION: Ceres Seq. ID no. 1816799  
US-09-935-625-16229

Query Match 100.0%; Score 22; DB 5; Length 1345;  
Best Local Similarity 100.0%; Pred. No. 4.5e+02;  
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AMVSE 5  
|||||  
Db 6 AMVSE 10

RESULT 12  
US-09-620-393B-801  
; Sequence 801, Application US/09620393B  
; GENERAL INFORMATION:  
; APPLICANT: ALEXANDROV, Nikolai et al.  
; TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES  
; FILE REFERENCE: 2750-1068P  
; CURRENT APPLICATION NUMBER: US/09/620,393B  
; CURRENT FILING DATE: 2000-07-21  
; NUMBER OF SEQ ID NOS: 9948  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 801  
; LENGTH: 201  
; TYPE: PRT  
; ORGANISM: Arabidopsis thaliana  
; FEATURE:  
; NAME/KEY: misc.feature  
; LOCATION: 1..201  
; OTHER INFORMATION: Xaa is any amino acid  
; FEATURE:  
; NAME/KEY: misc.feature  
; LOCATION: 1..201  
; OTHER INFORMATION: Ceres Seq. ID 1377728  
US-09-620-393B-801

Query Match 95.5%; Score 21; DB 5; Length 201;  
Best Local Similarity 80.0%; Pred. No. 93;  
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
QY 1 AMVSE 5  
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Db 71 AMVSE 75

RESULT 13  
US-09-620-393B-800  
; Sequence 800, Application US/09620393B  
; GENERAL INFORMATION:  
; APPLICANT: ALEXANDROV, Nikolai et al.  
; TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES  
; FILE REFERENCE: 2750-1068P  
; CURRENT APPLICATION NUMBER: US/09/620,393B  
; CURRENT FILING DATE: 2000-07-21  
; NUMBER OF SEQ ID NOS: 9948  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 800  
; LENGTH: 213  
; TYPE: PRT  
; ORGANISM: Arabidopsis thaliana  
; FEATURE:  
; NAME/KEY: misc.feature  
; LOCATION: 1..213  
; OTHER INFORMATION: Xaa is any amino acid  
; FEATURE:  
; NAME/KEY: misc.feature  
; LOCATION: 1..213  
; OTHER INFORMATION: Ceres Seq. ID 1377727  
US-09-620-393B-800

Query Match 95.5%; Score 21; DB 5; Length 213;  
Best Local Similarity 80.0%; Pred. No. 1e+02;  
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
QY 1 AMVSE 5

Db 83 AMVSE 87  
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RESULT 14  
US-09-620-393B-799  
; Sequence 799, Application US/09620393B  
; GENERAL INFORMATION:  
; APPLICANT: ALEXANDROV, Nikolai et al.  
; TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTID  
; FILE REFERENCE: 2750-1068P  
; CURRENT APPLICATION NUMBER: US/09/620,393B  
; CURRENT FILING DATE: 2000-07-21  
; NUMBER OF SEQ ID NOS: 9948  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 799  
; LENGTH: 220  
; TYPE: PRT  
; ORGANISM: Arabidopsis thaliana  
; FEATURE:  
; NAME/KEY: misc.feature  
; LOCATION: 1..220  
; OTHER INFORMATION: Xaa is any amino acid  
; FEATURE:  
; NAME/KEY: misc.feature  
; LOCATION: 1..220  
; OTHER INFORMATION: Ceres Seq. ID 1377726  
US-09-620-393B-799

Query Match 95.5%; Score 21; DB 5; Length 220;  
Best Local Similarity 80.0%; Pred. No. 1e+02;  
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
QY 1 AMVSE 5  
|||||  
Db 90 AMVSE 94

RESULT 15  
US-09-935-625-8720  
; Sequence 8720, Application US/09935625  
; GENERAL INFORMATION:  
; APPLICANT: N. ALEXANDROV et al.  
; TITLE OF INVENTION: POLYNUCLEOTIDES, POLYPEPTIDES, CELLS, AND METHODS THEREOF CAVA  
; FILE REFERENCE: 2750-1481P  
; CURRENT APPLICATION NUMBER: US/09/935,625  
; CURRENT FILING DATE: 2001-08-24  
; NUMBER OF SEQ ID NOS: 33136  
; SEQ ID NO 8720  
; LENGTH: 263  
; TYPE: PRT  
; ORGANISM: Arabidopsis thaliana  
; FEATURE:  
; NAME/KEY: peptide  
; LOCATION: 1..263  
; OTHER INFORMATION: Ceres Seq. ID no. 3019814  
US-09-935-625-8720

Query Match 95.5%; Score 21; DB 5; Length 263;  
Best Local Similarity 80.0%; Pred. No. 1.3e+02;  
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 AMVSE 5  
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Db 71 AMVSE 75

Search completed: July 9, 2002, 12:22:29

Tue Jul 9 13:40:24 2002

us-09-759-484-3.rapn

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Job time: 209 sec

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1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research. It also provides a brief overview of the methodology used in the study.

2. The second part of the report is a detailed description of the study area. It includes information about the location of the study area, the population of the study area, and the characteristics of the study area. It also discusses the data sources used in the study.

3. The third part of the report is a detailed analysis of the data collected during the study. It includes a description of the data collection process, a description of the data analysis process, and a discussion of the results of the data analysis.

4. The fourth part of the report is a conclusion and a discussion of the findings of the study. It includes a summary of the main findings of the study, a discussion of the implications of the findings, and a discussion of the limitations of the study.